



Government of West Bengal  
Government General Degree College, Kalna-I  
Muragacha, Medgachi, Purba Bardhaman-713405  
Website: [www.ggdck.ac.in](http://www.ggdck.ac.in); E-mail: [govt.collegekalna1@gmail.com](mailto:govt.collegekalna1@gmail.com)

MoU –10  
Academic Session 2020-21

SUBRATA ROY  
Notary

Govt. of India Regd. No.- 13818  
84, Vivekananda Road, Sonalipark  
P.O.- Sheoraphuli, Hooghly

M. : 8017224549

25 APR 2021

08 APR 2021

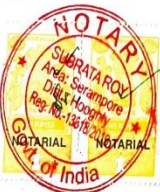
08 APR 2021

**NOTARIAL CERTIFICATE**

TO ALL TO WHOM THESE PRESENTS shall come, I, Subrata Roy, duly authorised by the GOVT. OF INDIA to practice as a Notary, do hereby authenticate, certify, attest as under the execution of the instrument annexed hereto collectively marked "A" on its being executed, admitted and identified by the respective signatories as to the matter contained therein, presented before me, according to that / this is to certify, authenticate and attest and that the annexed instrument "A" is the Memorandum of Understanding

By & Between  
Government General Degree College, Kalna-1  
..... (First Party)  
&  
Maulana Azad College, Kolkata.  
..... (Second Party)

Herein after referred to as the "executant (s)" on this the 8th day of April Two thousand Twenty One. The "executant(s)" having admitted the execution of the paper writings "A" in the respective hand (s) in presence of the witness (es) who as such subscribe (s) signature and being satisfied as to the Identity of the executant (s) and the said I have authenticated, verified & attested the execution of the "(Paper" and testify that the said execution is in the respective hand (s) of Being required of a Notary: I have granted these presents as my Certificate to serve and avail as need occasion shall require.



Notarial Stamp on Original  
SUBRATA ROY  
08 APR 2021

IN FAITH AND TESTIMONY WHEREOF; I, the said Notary have hereunto set and subscribed my hand and affixed my Notarial Seal of Office at (Serampore Court in the District Hooghly) on the day of April in the year of Christ 2021

SUBRATA ROY  
NOTARY, Govt. of India  
Reg. No.-13818/2019



পশ্চিমবঙ্গ পশ্চিম বঙ্গাল WEST-BENGAL  
SERAMPORE (DIST. HOOGHLY)

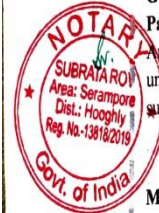
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25 APR 2021

The Memorandum of Understanding (hereinafter called the MOU) is entered into on this the 8th Day of April, 2021 (Two Thousand Twenty One)

BY AND BETWEEN

GOVERNMENT GENERAL DEGREE COLLEGE, KALNA-1, The First Party represented herein by its Principal as Representative and Competent Authority (Hereinafter referred as "First Party", the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors - in office, administrators and assigns)



MAULANA AZAD COLLEGE, KOLKATA, The Second party and represented herein by the Principal as Representative and Competent Authority (Hereinafter represented as "Second Party", the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors - in office, administrators and assigns)

Cont ....2

Principal  
Government General Degree College  
Kalna-1

Principal  
Maulana Azad College  
Kolkata  
Govt. of West Bengal

08 APR 2021

08 APR 2021

08 APR 2021

(2)

(First Party and Second Party are hereinafter jointly referred to as 'Parties' and individually as 'Party')

WHEREAS

- A) FIRST PARTY is a Government Higher Educational Institution named:
  - i) Government General Degree college, Kalna-1, Purba Bardhaman-713405
- B) First Party and Second Party believe that collaboration and cooperation between themselves will promote more effective use of each of their resources, and provide each of them with enhanced opportunities.
- C) The parties intend to cooperate and focus their efforts in cooperation within the area of Higher Education, Research and Development, provide opportunity for global experience, and to facilitate advancement of knowledge on the basis of reciprocity, best effort, mutual benefit, and frequent interactions.
- D) Both Parties being legal entities in themselves desire to sign this MOU for advancing their mutual interests.
- E) Maulana Azad College, Kolkata -700013, the Second Party is a Government Higher educational Institute of West Bengal under the aegis of the Department of Higher Education, Government of West Bengal and is engaged in imparting higher education by running under graduate Honours and General programmes in various Science, Arts and Commerce streams along with post graduate programmes in English, Urdu and Zoology at present with rights, possibility and extension thereafter.
- F) The Second Party presently functions from its own campus at 8, Rafi Ahmed Kidwai Road, Taltala, Kolkata -700013, West Bengal and will continue to do so until further order from the Department of Higher Education, Government of West Bengal. It has no other branch, wing, subsidiaries or extensions existing at present.



NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISE SET-FORTH IN THIS MOU, THE PARTIES HERE TO AGREE AS FOLLOWS:

Clause-I  
CO-OPERATION

- 1.1 Both the Parties are united by common interest and objectives, and they shall establish channels of communication and co-operation that will promote and advance -
  - Joint research projects and publications, including work by undergraduate and post graduate students at the partner institutions;
  - Faculty and student exchanges based on reciprocity;
  - Reciprocal placement of students and co-ops, when possible;
  - Team taught courses, including online courses;
  - Visits by faculty, professional staff and students;
  - Exchange of information on teaching, learning material and other literature relevant to their educational and research programmes;
  - Joint organization of short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate therein;
  - Joint organization of seminars, conferences, or workshops on topics of mutual interest and to invite each other's faculty to participate therein; and
  - Any other joint venture for academic enrichment of both the colleges on prior agreement of the Principals of both the Colleges; within the Institution and its related wings.
- 1.2 Both the Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.

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(3)

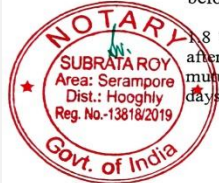
1.3 First Party and Second Party must respect each other's to intellectual property and the disputes if any, relating to any aspect of academic cooperation, Principals of both the College will jointly resolve the dispute in a spirit of independence, mutual respect, and shared responsibility.

1.5 Both the Parties mutually agreed not to include any financial transaction during the execution of this MOU.

1.6 Neither Party shall be held responsible for non-fulfillment of their respective obligation under this MOU due to circumstances beyond their control but not limited to pandemic, war, flood etc. If such condition continues beyond six months, the parties shall then mutually decide about the future course of action.

1.7 Nothing in this MOU shall be constructed to make either party a partner, an agent or legal representative of the other for any purpose. Now onwards both the party may mention the name and LOGO of the other in their documents as "COLLABORATOR" for purpose as may be required subject to communication by the user to the other party in writing beforehand.

1.8 This MOU unless terminated by mutual written agreement will continue for 5 years after the effective date specified in the opening paragraph and can be renewed through mutual interest. Either Party shall have the right to unilaterally terminate this MOU upon 90 days prior written notice to the other party.



Agreed:

For  
Government General Degree College, Kalna-I  
Purba Bardhaman-713405

For  
Maulana Azad College  
Kolkata-700013

*[Signature]*  
Principal  
Government General Degree College  
Kalna-I  
Authorized Signatory

*[Signature]*  
Principal  
Maulana Azad College  
Kolkata  
Authorized Signatory  
GOVT. OF WEST BENGAL

Government General Degree College,  
Kalna-I  
Purba Bardhaman-713405  
Ph: 9477501460  
E-mail: [govt.collegekalna1@gmail.com](mailto:govt.collegekalna1@gmail.com)  
Website: [www.ggdck.ac.in](http://www.ggdck.ac.in)

Maulana Azad College,  
Kolkata-700013, Ph:9433563658  
Email: [moulanaazadcollegekolkata@gmail.com](mailto:moulanaazadcollegekolkata@gmail.com)  
Website: [www.moulanaazadcollegekolkata.ac.in](http://www.moulanaazadcollegekolkata.ac.in)

Witness - 1

*[Signature]*  
Coordinating Officer  
IQAC, GSDC, Kalna-I

Witness - 2

*[Signature]*  
Associate Professor  
Maulana Azad College  
Kolkata

SOLEMNLY AFFIRM  
DECLARED BEFORE ME ON  
IDENTIFICATION BY ADVOCATE

**ATTESTED**  
*[Signature]*  
**SUBRATA ROY**  
Notary, Serampore Court  
Dist.-Hooghly  
Regn. No.-13818/2019

*[Signature]*  
**SUBRATA ROY**  
NOTARY, Govt. of India  
Reg. No.- 13818/2019

08 APR 2021

Dated 8<sup>th</sup> Day of April 2021

In the matter of  
Instrument "A"  
And  
In the matter of:  
**NOTARIAL CERTIFICATE**



सत्यमेव जयते

Serampore Court -  
**SUBRATA ROY**  
B. Com, LL.B, Advocate

Notary Public, Govt. of India  
Regd. No.- 13818  
District - Hooghly  
Chamber :  
10/1, G. T. Road Sandhya, Appartment,  
(Ground Floor) Sheoraphuli, Hooghly  
Residence :  
84, Vivekananda Road, Sonalipark  
P.O.- Sheoraphuli, Hooghly  
M. : 8017224549

NOTARIAL CERTIFICATE



*[Signature]*  
**SUBRATA ROY**  
NOTARY, Govt. of India  
Reg. No.- 13818/2019



**MOU Signed between Government General Degree College, Kalna-I & Maulana Azad College on 08.04.2021**



Government of West Bengal  
Government General Degree College, Kalna-I

**Declaration of MoU related activities**

<b>Name of the College:</b>	Government General Degree College, Kalna-I
<b>Name of the Collaborating Organization/ Institute</b>	Maulana Azad College Kolkata
<b>Start Date :</b>	08.04.2021
<b>Duration :</b>	5 Years
<b>Purpose of the MoU :</b>	Faculty exchange for academic upliftment and collaborative academic endeavours
<b>Collaborative activities Carried Out:</b>	
<b>Programme 1</b>	National level Webinar on “ <b>Glimpses of Mathematics in Ancient India</b> ”
<b>Programme 2</b>	A Webinar on “CRYPTOGRAPHY AND APPLICATION OF NUMBER THEORY”.
<b>Programme 3</b>	Principal, GGDC Kalna-I was the “Session Judge” at the 5 <sup>th</sup> Regional Science and Technology Congress, 2022-23
<b>A Report on the collaborative activities has also been attached.</b>	



*Dr.*  
**Principal**  
Government General Degree College  
Kalna-I

Government of West Bengal  
Government General Degree College, Kalna-I

**Summary Report of Programme 1**

<b>Name of the Programme :</b>	National level Webinar on “ <b>Glimpses of Mathematics in Ancient India</b> ”
<b>Objective :</b>	The event aimed to provide valuable insights and knowledge to students, faculty, and participants interested in ancient Indian Mathematics
<b>Target Participants :</b>	Students and faculties of Maulana Azad College and GGDC Kalna-I
<b>Venue :</b>	Google meet platform as well as YouTube streaming
<b>Date :</b>	<b>18.09.2021</b>
<b>Expected Outcome :</b>	Students and faculty members of both Institutions will be benefited in terms of their academic pursuit in several areas
<p>Report :Speakers: Dr. Parthasarathi Mukhopadhyay, Associate Professor, Department of Mathematics, Ramakrishna Mission Residential College shared his valuable time with the students and faculties of both the collaborating institute where he presented a topic “Glimpses of Mathematics in Ancient India” . His vivid example of our rich culture in mathematical heritage has made the listeners wonder and motivated to gain more knowledge in the field.</p>	



*D. K.*  
Principal  
Government General Degree College  
Kalna-I

**Maulana Azad College, Kolkata  
&  
Government General Degree College, Kalna - I**

Jointly Present  
**WEBINAR**  
on

**Glimpses of Mathematics in Ancient India**

18<sup>th</sup> September, 2021 5:00 PM (IST)

**Dr. Parthasarathi Mukhopadhyay**  
Associate Professor, Dept. of Mathematics  
Ramakrishna Mission Residential College (Autn.)  
Narendrapur, Kolkata

**JOIN US ON**

Zoom YouTube LIVE

E-Certificate will be provided on Successful Participation

[Click here for Online Registration\(Free\)](#)

Principal, Maulana Azad College    Principal, Government General Degree College, Kalna - I    Head, Dept. of Mathematics Maulana Azad College    Head, Dept. of Mathematics Government General Degree College, Kalna - I

Flyer

**Maulana Azad College, Kolkata  
&  
Government General Degree College, Kalna - I**

Jointly Present  
**WEBINAR**  
on

**Glimpses of Mathematics in Ancient India**

18<sup>th</sup> September, 2021

**Participant Certificate**

This is to certify that **RAKHI BHATTACHARYA**  
of **Government General Degree College, Kalna-I**  
has actively participated in the webinar on 'Glimpses of Mathematics in Ancient India'  
on 18<sup>th</sup> September 2021.

Dr. Subhasis Dutta  
Principal  
Maulana Azad College

(Prof.) Dr. Krishnendu Dutta  
Principal  
GGDC - I

Sample Certificate







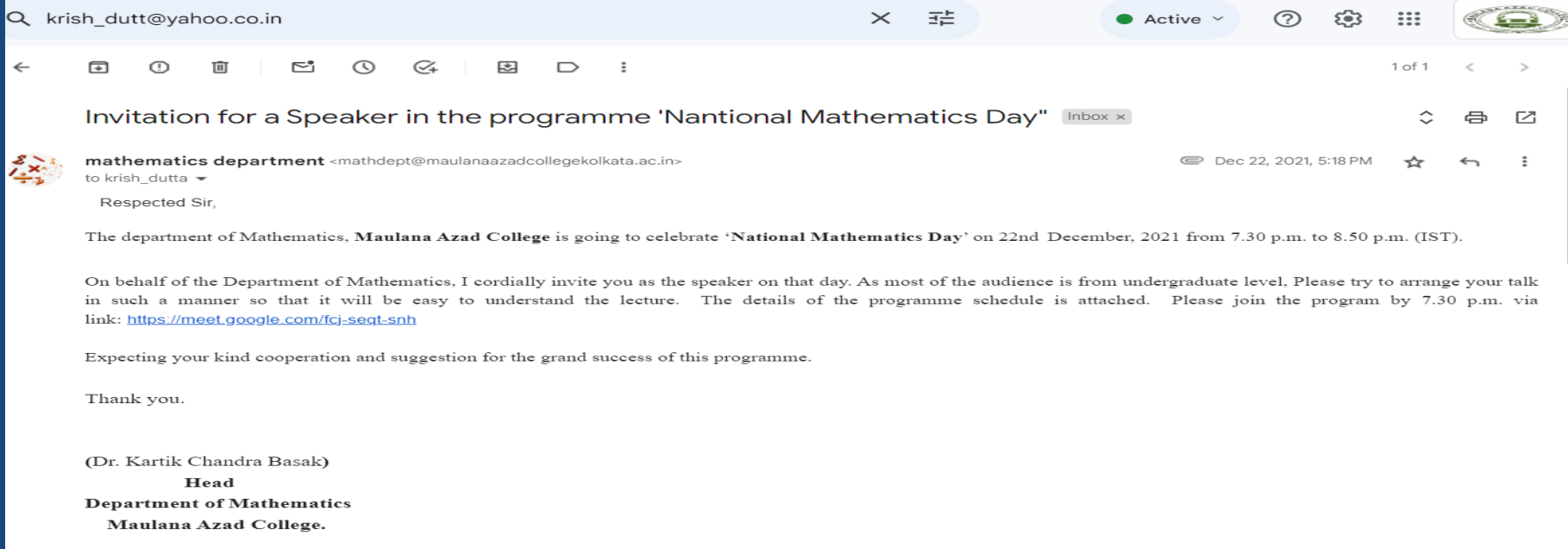
Government of West Bengal  
Government General Degree College, Kalna-I

**Summary Report of Programme 2**

<b>Name of the Programme :</b>	A Webinar on “CRYPTOGRAPHY AND APPLICATION OF NUMBER THEORY”.
<b>Objective :</b>	To inculcate values uphold by renowned mathematician Srinivasa Ramanujan
<b>Target Participants :</b>	UG students Students of Mathematics
<b>Venue :</b>	Maulana Azad College Kolkata
<b>Date :</b>	22.12.2021
<b>Expected Outcome :</b>	To be inquisitive and explore new areas of number theory
<p>Report : Prof. (Dr.) Krishnendu Dutta, Principal, Government General Degree College, Kalna-1 was the invited speaker in the Webinar on “CRYPTOGRAPHY AND APPLICATION OF NUMBER THEORY” on the National Mathematics Day celebration of The Department of Mathematics, Maulana Azad College Kolkata on 22.12.2021 from 7.30 p.m. to celebrate the birth anniversary of great Indian Mathematician SRINIVASA RAMANUJAN. The invited speaker Dr. Krishnendu Dutta, Principal, Government General Degree College, Kalna-1 delivered his valuable lecture. There are 67 participants of Mathematics Honours. The programme was inaugurated by the principal, Maulana Azad College Dr. Subhasis Dutta. Sri. Bishyay Majumder , Mathematics student of Maulana Azad College delivered a brief introduction about the National Mathematics Day. The whole programme organized by fifth semester students. The programme was ended by vote of thanks by Dipanjana Maity, Student, Maulana Azad College.</p> <p>The question answer session with enthusiastic query on the said subject from students made the event a success.</p>	



*[Signature]*  
Principal  
Government General Degree College  
Kalna-I



## Invitation letter of Speaker Prof. (Dr.) Krishnendu Dutta, Principal, GGDC Kalna-I

The flyer is for the National Mathematics Day event at Maulana Azad College. It features the college's logo on the left and a portrait of Srinivasa Ramanujan on the right. The text is as follows:

**MAULANA AZAD COLLEGE**  
8, Rafi Ahmed Kidwai Rd, Taltala, Kolkata, West Bengal 700013  
<https://maulanaazadcollegekolkata.ac.in>

**NATIONAL MATHEMATICS DAY**  
**22<sup>ND</sup> DECEMBER, 2021**

**TO COMEMORATE THE BIRTH ANNIVERSARY OF GREAT INDIAN MATHEMATICIAN**  
**SRINIVASA RAMANUJAN**

**ORGANISED BY**  
**DEPARTMENT OF MATHEMATICS**

**22<sup>ND</sup> DECEMBER, 2021, 7: 30 PM ONWARDS**

**MEETING LINK: <https://meet.google.com/fcj-seqt-snh>**

**LECTURE ON CRYPTOGRAPHY AND APPLICATION OF NUMBER THEORY**  
**BY DR. KRISHNENDU DUTTA**  
**PRINCIPAL, GOVERNMENT GENERAL DEGREE COLLEGE, KALNA-I**

**22 December 1887 – 26 April 1920**

**HEAD OF THE DEPARTMENT**      **IQAC COORDINATOR**      **PRINCIPAL**

Flyer of Programme 2

# National Mathematics Day

Organized by

Department of Mathematics and IQAC, Maulana Azad College, Kolkata  
On 22<sup>nd</sup> December, 2021

## Programme Schedule

Date: 22-12-2021

1. Inaugural Speech: 7.30 – 7.35 p.m.  
Dr. Subhasis Dutta, Principal, Maulana Azad College.
2. Welcome Address: 7.35-7.38 p.m.  
Dr. Nanda Das, Associate Professor, Department of Mathematics.
3. A brief Introduction about the National Mathematics Day by our 5<sup>th</sup> Semester Student BISHYAY MAJUMDER: 7.38-7.43 p.m.
4. Introduction of the Speaker by Dr. Somnath Bandyopadhyay,  
Associate Professor, Department of Mathematics.: 7.43-7.45 p.m.  
Title of the Talk is  
“CRYPTOGRAPHY AND AN APPLICATION OF NUMBER THEORY”  
Speaker: Dr. Krishnendu Dutta  
Principal, Government General Degree College, Kalna-I.
5. Vote of thanks: 8.45-8.50 p.m. Dipanjana Maity, Fifth Semester Student.



*Dr.*  
Principal  
Government General Degree College  
Kalna-I



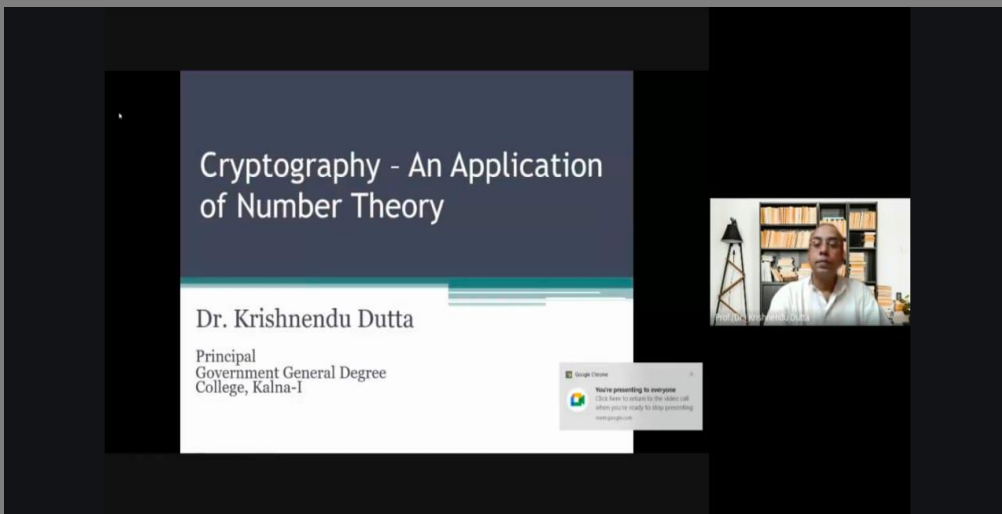
Bishyay Majumdar

**Brief Introduction about National Mathematics Day by our student Bishyay Majumdar**



Prof. (Dr.) Krishnendu Dutta

**Dr. Krishnendu Dutta , Principal, GGDC Kalna-I delivering his lecture**

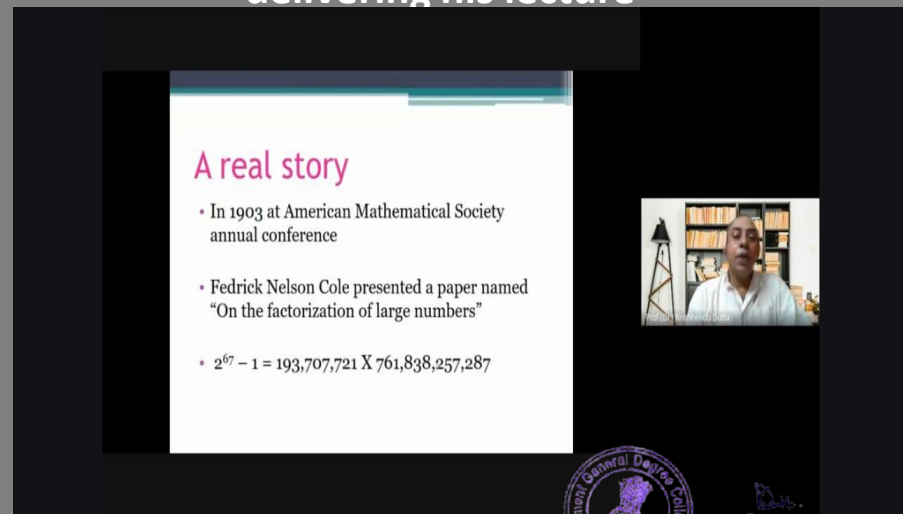


## Cryptography - An Application of Number Theory

Dr. Krishnendu Dutta

Principal  
Government General Degree  
College, Kalna-I

Google Chrome  
You're presenting to everyone  
Click here to update to the latest call  
software or click here to stop presenting  
www.google.com



## A real story

- In 1903 at American Mathematical Society annual conference
- Fredrick Nelson Cole presented a paper named "On the factorization of large numbers"
- $2^{67} - 1 = 193,707,721 \times 761,838,257,287$



**A few slide presented in the Programme**



# MAULANA AZAD COLLEGE

8 RAFI AHMED KIDWAI ROAD, TALTALA, KOLKATA 700013



## ***CERTIFICATE OF APPRECIATION***

*This is to certify that **Dr. Krishnendu Datta**, Principal, Government General Degree College, Kalna-1 has delivered lecture on “**CRYPTOGRAPHY AND APPLICATION OF NUMBER THEORY**” in the webinar held in the Department of Mathematics, Maulana Azad College in celebration of National Mathematics Day on 22<sup>nd</sup> December, 2021.*

*Head, Department of Mathematics*

*IQAC Coordinator*

*Principal*



*Dr. Krishnendu Datta*  
Principal  
Government General Degree College  
Kalna-1

Government of West Bengal  
Government General Degree College, Kalna-I

**Summary Report of Programme 3**

<b>Name of the Programme :</b>	Principal, GGDC Kalna-I was the “Session Judge” at the 5 <sup>th</sup> Regional Science and Technology Congress, 2022-23
<b>Objective :</b>	Executing the duty of an adjudicator at the 5 <sup>th</sup> Regional Science and Technology Congress, 2022-23
<b>Target Participants :</b>	All
<b>Venue :</b>	Maulana Azad College
<b>Date :</b>	4 <sup>th</sup> and 5 <sup>th</sup> January, 2023
<b>Expected Outcome :</b>	Increased scientific temper

Report :The Department of Science and Technology and Biotechnology, Government of West Bengal, has selected Maulana Azad College as one of the co-host Institutions to hold the 5<sup>th</sup> Regional Science and Technology Congress, 2022 for Region-4 (Kolkata, Howrah and South 24 Parganas) where the event has been scheduled on the 4th and 5th of January, 2023.

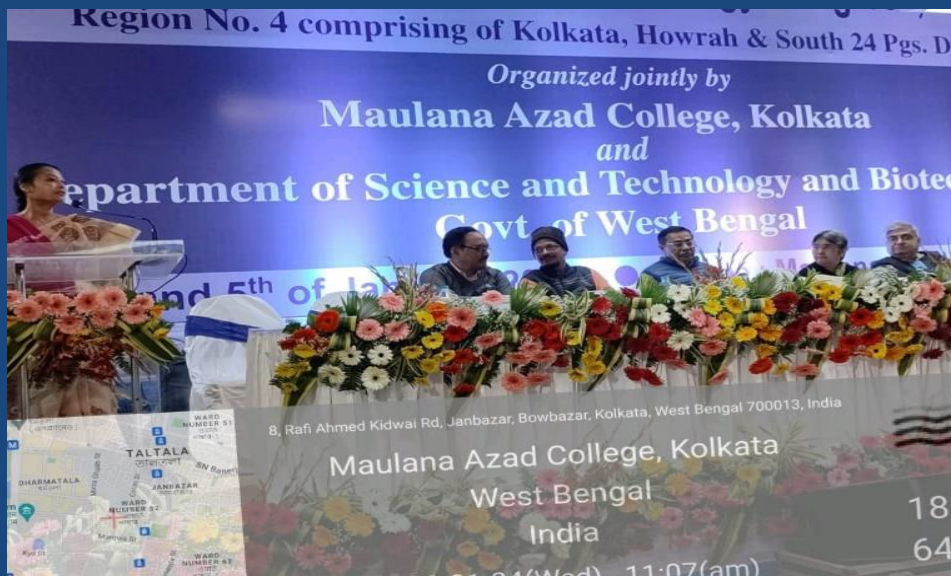
In this Science Congress, Dr. Krishnendu Dutta, Principal, Government General Degree College acted as a Session Judge in the Technical Sessions to adjudicate the ORAL PRESENTATIONS in the Discipline Mathematical Sciences on the 5th of January, 2023.



*Dr. Krishnendu Dutta*  
Principal  
Government General Degree College  
Kalna-I



**Dr. Krishnendu Dutta , Principal, GGDC Kalna-I**



**A few moments from the Programme III**

